

RAILROAD NEWS.

New Invention May Revolutionize Art of Boiler Making.

Work of H. W. Jacobs and F. W. Shupert of Santa Fe.

EXCELS IN MANY WAYS

Is Being Tested Between Needles and Seligman.

Other Items of Interest in Railway Circles.

An invention that promises to revolutionize the art of boiler making is being tested by the Atchison, Topeka & Santa Fe Railroad company on the Arizona division from Needles to Seligman and on the coast lines, says the Railway Record. It is the work of H. W. Jacobs, assistant superintendent of motive power at Topeka, Kan., and F. W. Shupert, boiler maker foreman at San Bernardino, Cal.

The Jacobs-Shupert firebox is a radical departure from the usual form of locomotive boiler construction. The usual flat firebox sheets and outer shell are replaced by sets of channel sections securely riveted together and the usual form of troublesome staybolt is replaced by stay sheets, except at the front and door sheets.

The Jacobs-Shupert firebox has been devised to obtain certain definite objects in the improvement of locomotive boilers and while the boiler, with the Jacobs-Shupert firebox applied, has been in service a comparatively short time, the indications are most favorable. This firebox represents years of careful investigation and study on the part of men in position to observe locomotive boiler operation and maintenance very closely, one of these men being a practical boilermaker. During the process of development, many capable mechanical men have passed judgment on the principles involved and in a number of instances their ideas have been embodied in the design.

Among the several advantages of the sectional form of construction, the principal are: An unusual element of safety; provision for expansion and contraction, due to variations in temperature; improved vertical circulation of water; acceleration of scrubbing action of water against the hot metal surface; increased heat transmission; greater evaporation per unit of heating surface and increased area of heating surface.

In the sectional firebox a possible rupture is confined to a single section and the destructive effects of an explosion would be confined to the simple escape of the contents of the boiler. It is the sudden tearing away of a large area of metal, as in the ordinary crown sheet that causes violent explosions and consequent disastrous results. In the sectional firebox the tearing away of a large area is impossible as the rupture cannot extend from one section to the next.

The arched sectional form of construction permits of expansion and contraction due to variations in temperature. Each section is free to expand or contract without producing excessive stresses or transmitting undue stress to adjacent sections. The entire structure is flexible and while expansion and contraction occur, the form and position of each section allows it to expand without straining the next section, thus relieving any stresses induced by temperature variations.

The holes for horizontal circulation through the radial stay sheets are of ample area to replace the water evaporated. The enlarged space within the individual sections encourages rapid vertical circulation and the more rapid this circulation, the greater the scouring action of the water against the hot metal.

The corrugated surface of the firebox is effective in causing a turbulent motion among the hot gases, and this rotating, whirling motion, by transmitting heat from the gases to themselves as well as in breaking through the film of inert gases which tend to collect in thin layers along the surface of the metal.

It has long been recognized by authorities in heat transmission that by producing a turbulent, scrubbing action of the hot gases against the side of the metal and by accelerating the scrubbing action of the water against the hot surface, the evaporative value of the heating surface is largely increased.

MAKE FREIGHT REDUCTIONS.

Nebraska State Board Issues Orders Cutting Tariffs.

Omaha, July 9.—At Lincoln the Nebraska railway commission issued an order in the classification and freight rates on railroads within this state. The rates will be submitted to the various railroads and at the hearings, dates for which have been sent, the roads will be required to show cause why the rates should not go into effect.

The rates proposed by the commission are reductions from the present rates fixed by the railroad companies from distributing points. The reductions are as follows: First class, 30; second, 25 to 30; third, 25; all other rates, 20 to 25 per cent reduction.

MAY DELAY NEW DEPOT.

Renter Won't Give Up Lease on Santa Fe Wichita Property.

Wichita, Kan., July 9.—After paying more than \$125,000 for property on Tremont street on which to build tracks and a fine new freight depot, it is possible that the Santa Fe Railway company may be balked in its plans. It all depends on the terms which it may be possible to make with one concern which occupies a part of the ground purchased.

This concern is the Callahan Transfer company, which has a lease on the building it now occupies, for a period of two years, and no plan has as yet been suggested that has resulted in getting the company to get out of the way for the construction of the big depot.

Before buying an automobile see the Inter-State, the best car for the money on the market. Call Hal Hotchkiss, 115 Greenwood ave., for demonstration.

See J. THOMAS LUMBER CO. for lumber and DEWEY PORTLAND CEMENT. Warranted none better.

THE "GOOD CLOTHES STORE"
The Palace
AUERBACH & GUETTEL CLOTHING CO.

NOW COMES THE BIG AND QUICK JULY CLEAN-UP SALE

Of Fine Suits Sold to \$25.00 for only \$18.00

YES This Is the Big "\$18.00 Sale"

that sterling bargain event when we forget profit in order to wind up our spring and summer suits at once—the clean-up in which the whole public is "let in on the ground floor." Nothing half way about it. Remarkable suit values, INCLUDING EVEN THE STAPLE BLACKS, ALSO BLUE SERGES from Hart, Schaffner & Marx, Alfred Benjamin & Co., and other standard wholesale tailors. Don't lose sight of the fact that you cannot get equal values for less than \$30 to \$35 elsewhere, and that we now give you choice of the whole assortment for EIGHTEEN DOLLARS!

July Clean Up Sale of \$30 and \$35 Suits for \$25

These are still finer grades all of which are to be swept out instantly! Choice of the most select imported and domestic fabrics in all the styles of the season; greens, grays, browns and mixtures unlimited. Some silk lined. All hand tailored. Choice for..... **\$25**

And Still Another Popular Sale at \$9.50

Magnificent selection of suits worth up to \$15, including many models received from the makers only a short time before the Fourth of July for men (1st floor) and young men (2nd floor). Midsummer effects in stripes, checks, plaids and solid colors; extreme or conservative models in all sizes. Two- or 3-piece styles. Choice for..... **\$9.50**

Special Price Cuts on Our Boys' Floor for Saturday Buyers!

\$18 Choice Saturday of our finest \$22.50 and \$25.00 Young Men's Suits—"L" System and Sampeck makes. Made in all the newest ideas in tailoring style; big cut coats and full peg trousers. This sale includes Blue Serges. Special for Saturday **\$18**.

\$9.50 Saturday special for Young Men's Two-Piece Suits. College cut; dip front coat with full peg pants in all the new shades; plain blue and fancy serges included that sold for \$15 and \$18. Sizes 31 to 36 chest.

\$3.65 Saturday for Boys' Knickerbocker Suits that sold for \$5 and \$6.50; made in the latest style, Norfolk or plain coats; some suits have two pair of pants; in fine all wool cassimeres and blue serges, ages 6 to 16 years. A big snap.

SPECIAL—Big sale of Wash Suits worth \$2.75 and \$2.50 for \$1.65. We purchased a huge assortment of the famous "Mothers' Friend" and "Cadet" brand of wash suits just in time for our big July event and can recommend them as the best bargains ever offered in wash goods. Buy all you can possibly afford for immediate and future use..... **\$1.65**

Saturday Furnishing Goods Specials

65c Saturday for boys' dress shirts plain or pleated coat style \$1.00 quality all sizes.

50c Saturday for boys' Bathing Suits in navy blue; two-piece style; all sizes.

45c Saturday for girls' and children's sailor hats—75c and \$1.00 quality.

59c Saturday for boys' Knickerbocker Pants 75c to \$1.00 quality, in all wool cassimere and fancy worsteds—sizes 3 to 17 years.

21c Saturday for boys' summer underwear short or long sleeves, knee or full length drawers, in all sizes.

19c Saturday for boys' 25c quality of Iron Clad Hose, sizes 6 to 10.

15c Saturday for boys' Wash Pants, 3 to 10 yrs., in neat dark patterns, 25c quality.

July Clean-Up Sale of \$5 and \$6 Stetson Oxfords

\$3.85

Not unknown kinds, but Stetson's and other famous makes. Complete range of sizes and shapes in button, lace or buckle styles. This will create a sensation, and we sincerely advise immediate action on your part.



Women's \$5 Tan Oxfords at \$2.50

It's a Clearance Sale of all new styles this season \$5.00, \$4.00 and \$3.50 finest Oxfords in genuine Russia tans and in many other novelties. All new—choice..... **\$2.50**

Many broken lines of Black Oxfords included in this sale at..... **\$2.50**

Sale of Misses' and Children's Shoes

Misses' and Children's 3-hole Blucher Ties, ankle straps—Kid, gun metal and tan Russia leathers—patent tips, plain and cap toes, heavy hand-turned and welted soles, low school heels, all sizes and widths, \$2.50, \$2.25 and \$2.00 Oxfords—pair Saturday..... **\$1.65**

Barefoot Sandals

That are guaranteed against ripping, made of tan willow calf leather, Sintac welted soles, sizes 5 to 8, 8½ to 11, 11½ to 2. Special price at \$1.10 to \$1.45.

Infants' Shoes

In tan and black leathers, worth up to 75c. Special Saturday..... **39c**

HERE'S A GOOD SCHEME FOR SUMMER

economy if you don't care to buy a suit—Get one of our thin summer coats, in any desired fabric, \$3.50, \$5.00 or \$7.50. Then go to our pants department and secure trousers to match or harmonize with the coat. We are selling \$7, \$8, \$9 Hart, Schaffner & Marx pants, made from mill ends of fine worsted and chevrons in outing and plain styles at..... **\$5**

July Clean-Up Shirt Sale!

July Clean-Up Sale \$1.50 Shirts for \$1.00 Here's a chance to own the best shirt you ever had for less than you generally pay for common kinds. Take your pick of beautiful summer styles in light soft fabrics, plain or patterned, collars and cuffs attached or detached. All sizes and proportions. No limit to number sold to each customer, at..... **\$1.00**

Underwear Sale—Tomorrow, Saturday, we offer \$1 and \$1.25 finest summer underwear in all colors, plain white, pink, blue and tan—also plain white in Balbriggan, lisle, Jap silk and the new drop stitch fabrics—all sizes—Special price on this \$1.00 and \$1.25 underwear while it lasts..... **85c**

MARATHON Athletic Fashion Underwear, also "Poros-knit" Underwear of which 50c is usual price—Saturday for..... **35c**

Soft Shirt Sale—We offer a lot of men's soft shirts in white, tan, blue and fancy stripes—many of them with the self silk stripe, collar and cuffs attached, 75c values on sale Saturday at..... **45c**

Hose Sale—1800 pairs of hose that sold at 25c, 35c and some 50c—all colors, including black and fancy weaves—in all sizes from 9 to 11½. Surplus stock of a famous New York hose importer. Buy all you need for a year—choice of this lot Saturday..... **19c**

Sale of Summer Suspenders—light weight, made of imported lisle with trimmings to match—also 60c President suspenders included in this sale..... **25c**

A New Pair For a Hole

Troubled with your stockings? We've got an article that we guarantee against holes or runs for six months. No "ins" or "outs"—it's a hole designed you get a new pair.

Eveready Hosiery The newest idea in stockings. Made to wear; not only to sell. That's why we guarantee them absolutely. Men's 25c 6 for \$1.50 Women's Hose 35c—6 for \$2.00



Sale of Fine Straw Hats for \$1.65

This sale includes selections from regular \$2, \$2.50, \$3, lines and embraces every desired style, weave and shape. It's a chance for a snug saving on a small expenditure and goes into effect at once. It's caused by a late shipment so you may know the styles are just right.

HE DOESN'T LIKE IT.

Tariff Tinkering Now Going on at Washington.

To the Editor of the State Journal: If the tariff tinkering now going on at Washington doesn't make a man swearing mad he is certainly a Christian.

Democrats ought to have some backbone and declare for absolute free trade. "Let every tub set on its own bottom." "Infant industries" have ceased; the croup and cholera infantum prevailed years ago, but we have been having genuine stomach trouble for 50 years.

The American farmer ought to be "stood up" in a corner with a dunce cap on his head for selling his products in the open free market of the world and buying all his goods in a protected one; paying more for his machinery made here than the foreigner pays for it across the big pond.

Infant industries are now all full grown trusts running the government by having the men in the senate and house who fix it up no matter what party they belong to.

It ought to open their eyes. If it doesn't a guardian ought to be appointed to run their affairs; make them quit talking party business and get down to a little common horse sense and business.

The idea of tariff a tax on sugar, lumber, and like necessities is so ridiculously funny that Aldrich and Joe Bailey ought to take it off and put \$10 a head on fools and the treasury would be overflowing.

I just simply refuse to be interviewed further on the subject. Furiously yours, G. W. COFFIN, Council Grove, Kan., July 7, 1909.

STATE LEAGUES

Where They Play Tomorrow.

KANSAS STATE LEAGUE. Great Bend at McPherson. Hutchinson at Strong City. Arkansas City at Lyons. Newton at Wellington. CENTRAL KANSAS LEAGUE. Junction City at Beloit. Clay Center at Ellsworth. Manhattan at Salina. Abilene at Minneapolis.

La Rock, the Indian pitcher who has been expected to join the Manhattan Muggwumps ever since the season started, has finally put in an appearance. He ascribed his delay to getting married.

Hamlin, one of Hoffman's umpires, made some bad decisions at Manhattan recently for which he was dubbed "fat and saucy" by one of the Manhattan sport writers.

Boss Quigley, of the Salina team, has slumped nearly 100 points in his batting average in one week. He dropped from .497 to .399.

Junction City has a pitcher Lien who hasn't worked a game since the season started, and yet the papers of that village refer to him as one of the best in the league. He is on the sick list.

Junction City Union: Knocking, carping fault finding fans have cost Junction City one of her best baseball players. Dugan jumped the team to-

day, going to his home in Kansas City. He has not been released, but it is not probable that he will be induced to agree to a Junction City uniform. Dugan has worked hard to win every day. He is a conscientious ball player. Little of the knocking which has been going on has been directed against him but he has felt it just the same and says that he does not want to play here anymore.

Here is a little dope about Billy Smith who is playing shortstop for the McPherson team, taken from the Lincoln (Neb.) Evening News: Billy Smith, the Lincoln midget, who played with Guy Green's Indians last season while under contract to the Lincoln club, is covering the short field this summer for the McPherson club in the Kansas State league. He is credited with playing wonderful ball for McPherson, which club leads the league, but the other day he slipped up on five chances, more than he makes ordinarily in a month. Billy has appealed to the national association for his release from Lincoln, claiming that the failure of the local management to use him in organized ball last summer, while he was under contract, entitles him to his walking papers.

The case is now pending before the directors of the national association. Smith is an infielder of exceptional brilliance, but his inability to connect with good pitching threatens to keep him out of fast company.

Junction City Sentinel: The ax brought the team within the salary limit yesterday evening. Edwards, Dell and Miller were all released and Martin also went into the discard. The release of the three first named has kept track of baseball. Martin's release may be a disappointment to many people, but it will be otherwise with everyone who follows the game closely. Martin is a keen fielder, so far as picking up ground hits and hurling the ball to first base is concerned. But he does not know the game and shortcomings above his shoulder line are apt to keep him from learning it. As a hitter, he is an absolute failure and on the bases he can pull off all the 57 varieties of boneheaded stunts. You have to give it to him though for spectacular picking up of ground balls and slugging them to first. But when that is said, you have to quit saying nice things of Martin or quit speaking the truth.

RAINS DELAY HARVESTING.

Much of the Wheat Is Dead Ripe and Should Be Cut.

Salina, Kan., July 8.—The heavy rains which fell this week have stopped harvesting for the time. The rain at times was heavy and again it fell slowly and steadily, making the ground very soft. As a result no machine can get into the fields.

Much of the wheat is dead ripe and must be cut at once. It is said that continued rains like those of a few weeks ago will cause a great loss. Harvest hands are in town waiting for sunshine to dry the fields and allow the work to proceed, but the close atmosphere and the falling barometer give little encouragement for anything like settled dry weather.

Grain men stated that this rain would undoubtedly keep new wheat off the local market this week at least. They had expected the wheat to commence coming in by Saturday, but now feel certain that none can come in before next week at the earliest. And continued wet weather might delay another week.

Summer Resorts

North and East

You take your choice of the lake region of Minnesota, the piney woods and myriad lakes of northern Wisconsin and Michigan—the fisherman's utopia, the Great Lakes resorts, the Highlands of Ontario, the St. Lawrence River and Thousand Islands, New England, Eastern Canada and the Atlantic Coast, anything from the little cabin in the northern woods to the ultra-fashionable watering places of the east.

Rock Island Lines

carry you quickly, safely and comfortably to Chicago, St. Louis, St. Paul and Minneapolis, the radiating centers for the greatest resort region in the world, where connections can be made by rail or steamer to the place you wish to go.

Very Low Fares

will be in effect all summer, tickets allowing of liberal stop-over privileges and with long return limit. Ask for booklet, "Northern and Eastern Summer Resorts."

Never too busy to answer questions.

H. H. HUNT, City Pass. Agt. Phones 384

